# UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE GULF OF MEXICO REGION

# **ACCIDENT INVESTIGATION REPORT**

	OCCURRED DATE: 13-OCT-2008 TIME: 1620 HOURS  OPERATOR: Walter Oil & Gas Corporation REPRESENTATIVE: Rodriguez, Paul TELEPHONE: (713) 659-1222  CONTRACTOR: Diamond Offshore REPRESENTATIVE: Wills, Donald TELEPHONE: (985) 839-4185	STRUCTURAL DAMAGE  X CRANE OTHER LIFTING DEVICE DAMAGED/DISABLED SAFETY SYS. INCIDENT >\$25K H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
	LEASE: G21738  AREA: EW LATITUDE: BLOCK: 871 LONGITUDE: PLATFORM:	PRODUCTION X DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO.
	RIG NAME: DIAMOND OCEAN SARATOGA	☐ OTHER
	ACTIVITY: X EXPLORATION (POE) DEVELOPMENT/PRODUCTION (DOCD/POD)  TYPE:  HISTORIC INJURY REQUIRED EVACUATION LTA (1-3 days) LTA (>3 days RW/JT (1-3 days) RW/JT (>3 days)	8. CAUSE:  X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	Other Injury	9. WATER DEPTH: 868 FT.
	FATALITY POLLUTION FIRE EXPLOSION	10. DISTANCE FROM SHORE: 66 MI.
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	11. WIND DIRECTION: E  SPEED: 20 M.P.H.  12. CURRENT DIRECTION: ENE  SPEED: 5 M.P.H.
	COLLISION   HISTORIC   S\$25K   C <= \$25K	12 CFA CTATE. <b>6</b> FT

MMS - FORM 2010 PAGE: 1 OF 3

EV2010R

## 17. DESCRIBE IN SEQUENCE HOW ACCIDENT HAPPENED:

The crane operator was in the process of raising the crane boom in order to set the upper limits for the starboard crane after the rig mechanic had completed changing out the High Angle Kick-Out control valve for the crane. The boom was hoisted to the upper limit stops to set and test the high angle kick out assembly. Once the boom reached the desired angle and didnit kick out, the mechanic voiced to the crane operator an zall stop; command. The crane operator released the boom control joystick and the boom continued to rise. The crane operator then pulled the hydraulic shut down but the boom still continued to rise. The crane operator then announced over the intercom for personnel to clear the area. The mechanic and crane operator then vacated the crane and the boom toppled over the back of the gantry. No injuries or pollution resulted from this incident.

#### 18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

The replacement valve was a new design type and was not installed correctly. The circuit flow for the hydraulic fluid was opposite from the original designed boom kick out valve. The boom kick out valve was installed per the original crane drawings which proved to be backwards. Hydraulic fluid was trapped in the valve causing the boom controls to lock-up (i.e. pressure could not be released). This hydraulic lock effect also rendered the cranes hydraulic shut down ineffective.

#### 19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

The Original Equipment Manufacturer (OEM) provided the replacement valve without drawings or documentation to show the circuit flow had changed on the newly designed valve.

### 20. LIST THE ADDITIONAL INFORMATION:

The crane manufacturer is SeaTrax. All parts supplied by the OEM will have detailed installation procedures and drawings prior to installation.

The rig contractor will make the following crane operating changes: (1) Prior to lifting the crane boom after any repairs to the mechanical or electrical components, the controls shall be function tested with the boom in the boom rest. Manually function both the lower and upper hydraulic limit switches while the boom is inside the cradle. (2) The crane operator did not pull the Engine Emergency Stop for the crane engine before the boom had started buckling over the gantry. In all situations where the crane controls have been lost, the first response will be to activate the engine Emergency Shut-Down.

MMS - FORM 2010 PAGE: 2 OF 3

EV2010R 29-JUN-2009

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

Crane boom, smokers building, and work Failed crane boom, builings damaged from shed.

debris.

ESTIMATED AMOUNT (TOTAL): \$340,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Houma District has no recommendations to the Regional Office.

- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:
- 25. DATE OF ONSITE INVESTIGATION:
- 26. ONSITE TEAM MEMBERS:

Ben Coco /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: 05-JAN-2008

MMS - FORM 2010 PAGE: 3 OF 3

EV2010R 29-JUN-2009